

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Andres Belalcazar et al.                      Art Unit : Unknown  
Serial No. :    Examiner : Unknown  
Filed : December 3, 2003  
Title : MONITORING THORACIC FLUID CHANGES

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

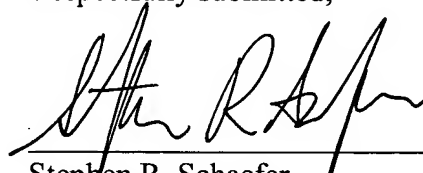
INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449.

This statement is being filed with the application. Accordingly, only copies of foreign patent documents and non-patent literature are enclosed. Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: Dec. 3, 2003

  
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Stephen R. Schaefer  
Reg. No. 37,927

Fish & Richardson P.C., P.A.  
60 South Sixth Street  
Suite 3300  
Minneapolis, MN 55402  
Telephone: (612) 335-5070  
Facsimile: (612) 288-9696

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December 3, 2003  
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Substitute Form PTO-1449 (Modified)  <b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)  (37 CFR §1.98(b))	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 09531-157001	Application No.
		Applicant Andres Belalcazar et al.	
		Filing Date December 3, 2003	Group Art Unit

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	4,932,408	06/12/90	Schaldach			
	AB	5,154,170	10/13/92	Bennett et al.			
	AC	5,438,987	08/08/95	Thacker et al.			
	AD	5,556,421	09/17/96	Prutchi et al.			
	AE	5,814,076	09/29/98	Brownlee			
	AF	5,824,029	10/20/98	Weijand et al.			
	AG	5,876,353	03/02/99	Riff			
	AH	5,931,858	08/03/99	Kadhiresan et al.			
	AI	5,957,861	09/28/99	Combs et al.			
	AJ	5,974,340	10/26/99	Kadhiresan			
	AK	6,070,100	05/30/00	Bakels et al.			
	AL	6,161,042	12/12/00	Hartley et al.			
	AM	6,223,079	04/24/01	Bakels et al.			
	AN	6,269,264	07/31/01	Weyant et al.			
	AO	6,277,078	08/21/01	Porat et al.			
	AP	6,278,894	08/21/01	Salo et al.			
	AQ	6,360,123	03/19/02	Kimchi et al.			
	AR	6,434,408	08/20/02	Mulligan et al.			
	AS	6,454,719	09/24/02	Greenhut			
	AT	6,473,640	10/29/02	Erlebacher			
	AU	6,512,949	01/28/03	Combs et al.			
	AV	6,595,927	07/22/03	Pitts-Crick et al.			
	AW	2001/0020138	09/06/01	Ishigooka et al.			
	AX	2002/0115939	08/22/02	Mulligan et al.			
	AY	2002/0123674	09/05/02	Plicchi et al.			
	AZ	2002/0143368	10/03/02	Bakels et al.			
	AAA	2002/0161310	10/31/02	Daum			

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

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	ABB	2003/0023184	01/30/03	Pitts-Crick et al.			
	ACC	2003/0028221	02/06/03	Zhu et al.			
	ADD	2003/0078619	04/24/03	Bonnet et al.			
	AEE	2003/0093125	05/15/03	Zhu et al.			

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AFF							

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AGG	Bocchiardo et al., "Biventricular Pacing Optimization Using Impedance Feasibility Study," <u>Europace Supplements</u> , 2002, 3:A39, Abstract No. 54/3
	AHH	Bronzino (ed.), "Chapter 73 – Bioelectric Impedance Measurements," <u>The Biomedical Engineering Handbook</u> , Second Edition, Volume 1, 2000, A CRC Handbook Published in Cooperation with IEEE Press, pp. 73-1 – 73-8
	AII	Cole et al., "Correlation of Impedance Minute Ventilation with Measured Minute Ventilation in a Rate Responsive Pacemaker," <u>PACE</u> , 2001, 24:989-993
	AJJ	Duru et al., "Rate Responsive Pacing Using Transthoracic Impedance Minute Ventilation Sensors: A Multicenter Study on Calibration Stability," <u>PACE</u> , 2002, 25(12):1679-1684
	AKK	Hauck, "A Minute Ventilation Sensor Derived from Intra-Thoracic Electric Impedance as a Cardiac Pacemaker Rate Modulator," A Thesis Submitted to the Faculty of the Graduate School of the University of Minnesota, Department of Electrical Engineering, June 1993, 148 pgs.
	ALL	Nappholtz et al., "Electrode Configurations for a Respiratory Impedance Measurement Suitable for Rate Responsive Pacing," <u>PACE</u> , 1986, Part II, Vol. 9, pp. 960-964
	AMM	Patterson, "Possible technique to measure ventricular volume using electrical impedance measurements with an oesophageal electrode," <u>Medical &amp; Biological Engineering &amp; Computing</u> , 1987, 25:677-679
	ANN	Plicchi et al., "Monitoring Intrapulmonary Bioelectric Impedance During Active Volume Overloading," <u>Europace Supplements</u> , 2002, 3:A39, Abstract No. 54/6
	AOO	Van De Water et al., "Monitoring the Chest with Impedance," <u>Chest</u> , 1973, 64(5):597-603
	APP	Wang et al., "Feasibility of Predicting CHF Hospitalization Using Pacemaker-Based Impedance Sensor in CHF Patients," <u>J. Cardiac Failure</u> , 2002, 8(4, Suppl.):S81, Abstract No. 297
	AQQ	Wang et al., "Feasibility of Monitoring Thoracic Congestion with Impedance Measured from an ICD Lead System in a Chronic Heart Failure Dog Model," <u>PACE</u> , NASPE Abstracts, 2000, Part II, Vol. 23, No. 4, p. 612, Abstract No. 237

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(37 CFR §1.98(b))			

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	ARR	Yu et al., "Early Warning of CHF Hospitalization by Intra-Thoracic Impedance Measurement in CHF Patients with Pacemakers," <u>PACE</u> , NASPE Abstracts, 2002, Part II, Vol. 25, No. 4, p. 527, Abstract No. 19

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